

### Abstract

A communication provider which provides wireless access to a packetized data network, such as the Internet. The provider includes a server computer. The server computer is connected to the network, which is at least in part a wired network. A client device is also connected to the network, including by wireless means. The wired network is connected to a cellular wireless communications system. Payloads of information communicated by the server computer to the client device are assigned corresponding Global Sequence Numbers. By determining a time differential between next succeeding payloads received by the client, a determination is made whether any payload loss occurs on a wired portion of the network or on a wireless portion of the network. Headers of all payloads of information are compressed together and transmitted together, in order to limit communications and amount of data communicated. A send rate of the server computer is adjusted in relation to an effective receive rate of the client device.